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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,934	04/14/2004	James F. Stelzer	WSTR 8465	5288

321 7590 06/13/2006

SENNIGER POWERS
ONE METROPOLITAN SQUARE
16TH FLOOR
ST LOUIS, MO 63102

EXAMINER	
PHAM, MINH CHAU THI	
ART UNIT	**PAPER NUMBER**
1724	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/823,934	STELZER ET AL.	
	Examiner	Art Unit	
	Minh-Chau T. Pham	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *23* is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-22 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Shohet et al (3,449,891), in view of either Wang (2005/0126137 A1) or Percy (4,704,143).

Shohet et al disclose an air induction system for an engine of an aircraft to receive intake air, remove contaminants from the intake air, and provide the intake air for delivery to the engine comprising a housing (66) having a hollow interior with at least one entryway (36) for receiving intake air to the housing (66), a contaminant separator (24, 26) for removing contaminants from the air, and an exit for discharge of air from the housing, a duct (50) positioned adjacent the exit of the housing (66) to receive intake air therefrom for delivering the air to the engine (see details of Fig. 2, col. 5, line 51 through col. 6, line 10), a seal (118) positioned between the housing and the duct for preventing passage of air therethrough (col. 6, lines 29-70). Shohet et al further disclose the housing comprising a nacelle and a frame at the back end of the nacelle with the exit wherein the front of the duct (50) is received through the opening (see details of Figs. 2, 3 & 7), an entryway comprising an opening (38) formed in the housing (66), the contaminant separator (24) being mounted across the entryway (36) and the separator having a porous media (see 24 in Fig. 2). Shohet et al also disclose the air induction system comprising a rod (252) securing the nacelle wherein the first end secured to the frame being slidably movable in a slot attached to the frame and being arranged a

locking position when the nacelle swings to the open position (see col. 8, line 44 through col. 9, line 44). Shohet et al clearly show in Fig. 4, the seal (118) is located outside of the passageway (66) or in Fig. 5, the seal (111) is located outside the passageway (110), and none of the seal is exposed to air flowing in the internal passageway of the duct. Regarless, the Examiner introduces Wang or Percy as the secondary references to show: Wang discloses a securing binding (60) of a soft plastic material and a binding belt (70) used to bind the securing binding (60) onto the cylinder body (80), thus, an enclosed stable and air tight securing seat structure is obtained (see page 2, paragraphs 0025-0027). Percy discloses a sealing band (11) with gasket (12) closely abuts the edges of the filter elements and prevents unfiltered air from passing around the filters (see Figs. 1-3, col. 4, lines 10-14). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an outside seal as taught by either Wang or Percy in the air induction system for an aircraft of Shohet et al since this structure of sealing would promote tight connection between the duct and the filter housing to achieve optimal filtration while effectively preventing any air bypassing.

Allowable Subject Matter

Claim 23 allowed.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior arts discloses an air induction system for an aircraft engine with the structure of the seal such as the seal extending around the outer surface of the duct such that the seal is not exposed to air flowing in the flow path inside the duct, the

seal being formed from an elastic material for permitting relative movement between the duct and the housing of the nacelle while maintaining an airtight seal between the duct and the housing, the seal being stretchable to about twice its unloaded length without damaging the seal, and the seal including a slack portion equal to about twice the length required for the seal.

Response to Amendment

Applicant's arguments filed on April 19, 2006 have been fully considered but they are not persuasive.

Applicant argues that none of the cited references Shohet et al, Wang or Percy discloses "the system having the seal disposed between the outside of the duct and the housing". The Examiner respectfully disagrees. Shohet et al clearly show in Fig. 4, the seal (118) is located outside of the passageway (66) or in Fig. 5, the seal (111) is located outside the passageway (110), and none of the seal is exposed to air flowing in the internal passageway of the duct. Regarless, the Examiner introduces Wang or Percy as the secondary references to show: Wang discloses a securing binding (60) of a soft plastic material and a binding belt (70) used to bind the securing binding (60) onto the cylinder body (80), thus, an enclosed stable and air tight securing seat structure is obtained (see page 2, paragraphs 0025-0027). Percy discloses a sealing band (11) with gasket (12) closely abuts the edges of the filter elements and prevents unfiltered air from passing around the filters (see Figs. 1-3, col. 4, lines 10-14). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to

provide an outside seal as taught by either Wang or Percy in the air induction system for an aircraft of Shohet et al since this structure of sealing would promote tight connection between the duct and the filter housing to achieve optimal filtration while effectively preventing any air bypassing.

Claim 23 is allowable and the reason for indicated the allowable subject matter is indicated above.

Applicant's arguments with respect to claims 1-22 have thoroughly been considered but are moot in view of rejection, as discussed above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571)

272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh-Chau Pham
Patent Examiner
Art Unit: 1724
June 8, 2006

DUANE SMITH
PRIMARY EXAMINER
6-12-06